CLAIMS

1. Peptide sequence characterized in that it comprises or is constituted by a fragment of at least approximately 10 amino acids originating from the following sequence SEQ ID NO: 1:

$TPVQNKRRRS_pVTPPEEQQE$ SEQ ID NO: 1

in which the serine residue in position 10 is phosphorylated,

said above-mentioned fragment containing said phosphorylated serine residue.

2. Peptide sequence according to claim 1, characterized in that it comprises or is constituted by the following sequence SEQ ID NO: 2:

$QNKRRRS_pVTPPEEQ$ SEQ ID NO: 2

in which the serine residue in position 7 is phosphorylated.

3. Peptide sequence according to claim 1 or 2, characterized in that it comprises or is constituted by one of the following sequences:

- sequence SEQ ID NO: 3, representing the CDC25B1 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 339 of which is phosphorylated, or
- sequence SEQ ID NO: 4, representing a CDC25B2 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 312 of which is phosphorylated, or
- sequence SEQ ID NO: 5, representing a CDC25B3 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 353 of which is phosphorylated, or
- sequence SEQ ID NO: 6, representing a CDC25B4 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 374 of which is phosphorylated, or
- sequence SEQ ID NO: 7, representing a CDC25B5 splicing variant of the protein of human origin of CDC25B phosphatase, the serine residue in position 361 of which is phosphorylated.

4. Polyclonal or monoclonal antibody capable of recognizing a peptide sequence according to any one of claims 1 to 3.

5. Polyclonal antibody capable of recognizing the sequence SEQ ID NO: 2 as defined in claim 2.

6. Process for the preparation of a monoclonal antibody according to claim 4 directed against the peptide sequence SEQ ID NO: 2 as defined in claim 2, characterized in that it comprises the following steps:

– the immunization of an animal by injection of the peptide sequence according to claim 2,

– the fusion between myelomas of an animal and splenocytes of an animal in order to obtain hybridomas,

– the culturing of the hybridomas thus obtained, and

– the recovery and purification by cloning of a hybridoma, chosen from those obtained in the previous step and secreting an antibody directed against the peptide sequence according to claim 2.

7. Pharmaceutical composition characterized in that it contains, as active ingredient, a peptide sequence according to any one of claims 1 to 3, an antibody according to claim 4 or 5, in association with a pharmaceutically acceptable vector.

8. Use of a peptide sequence according to any one of claims 1 to 3, an antibody according to claim 4 or 5, for the preparation of medicaments intended for the treatment of cancers, such as breast cancers.

9. Use of an antibody according to claim 4 or 5, for implementing a method for *in vitro* diagnosis or prognosis of cancers in humans or animals, in particular breast cancers.

10. Method for *in vitro* diagnosis or prognosis of cancers, in particular breast cancers, in humans or animals, characterized in that it comprises:

– placing an antibody according to claim 4 or 5 in the presence of a biological sample taken from an individual, said antibody being, if appropriate, fixed on a solid support, and

– the detection of a peptide sequence according to any one of claims 1 to 3, which is liable to be present in the biological sample using labelled reagents, in particular labelled antibodies, recognizing either the antibody bound to said peptide sequence, or the peptide sequence bound to said antibody in the complexes formed during the previous step between the antibody and the peptide sequence which is liable to be present in the biological sample, this occurring, if appropriate, after suitable rinsing of the solid support.

11. Method for screening a molecule capable of binding to a peptide sequence according to any one of claims 1 to 3, said molecule being liable to be used as an antitumoral agent or antiproliferative agent, characterized in that it comprises:

- placing said molecule in the presence of the above-mentioned peptide sequence, and

- the detection of the binding of said molecule by the use of appropriate competition methods, in particular competition with the binding of an antibody according to claim 4 or 5.